DOCUMENT RESUME

ED 395 670 PS 024 203

AUTHOR Casper, Lynne M.
TITLE Who's Minding Our Preschoolers?
INSTITUTION Bureau of the Census (DOC), Washington, DC. Economics and Statistics Administration.
REPORT NO P70-53
PUB DATE Mar 96
NOTE 9p.
PUB TYPE Statistical Data (110) -- Reports - Descriptive (141) -- Collected Works - Serials (022)
JOURNAL CIT Current Population Reports; Mar 1996

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Census Figures; *Child Caregivers; Child Rearing; *Day Care; Demography; Economic Factors; *Employed Parents; Employed Women; Family Day Care; Family Income; Mothers; National Surveys; Parents; Population Trends; Preschool Education; Quality of Life; Socioeconomic Background; *Socioeconomic Influences; Working Hours; Young Children
IDENTIFIERS Child Care Costs; *Child Care Needs; Survey of Income and Program Participation

ABSTRACT

This report presents a statistical portion of the child care arrangements working parents use for their preschoolers, and changes observed in those arrangements from 1988 to 1993. Data shown by the Survey of Income and Program participation suggest that: (1) Almost half of preschoolers are cared for by relatives while their mothers are at work; (2) Preschoolers' child care arrangements have changed dramatically over the past few years; (3) Mothers working evening or night shifts and mothers working part time have an easier time arranging for relative and in-home care; (4) Black and Hispanic mothers rely more heavily on their relatives to provide child care assistance while they are working than do White mothers; (5) Children who live with only one parent are much more likely to be cared for by their grandparents and other relatives than are children who live with married-couple parents; (6) Relatives provide a great deal of child care for preschoolers in poor families; (7) Children in families receiving benefits are more dependent on relatives to provide child care; and (8) Organized child care facilities are more popular in the South and in the suburbs. (AA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Current Population Reports
Household Economic Studies

Who's Minding Our Preschoolers?

By Lynne M. Casper

CENSUS BUREAU
P70-53
March 1996

ED 395 670
PS 024203

One of the greatest challenges for employed parents is finding good quality, low cost child care. Reliable, quality care is especially important for preschoolers because young children are dependent on caregivers to fulfill their basic needs and to keep them from harm. Preschoolers are also in the midst of forming personalities, developing cognitively, and learning social skills, and child care providers can and do have a major impact on these processes and their outcomes. For these reasons, finding the right provider is critical. In this report, we examine how working parents arrange care for their preschoolers.

Almost half of preschoolers are cared for by relatives while their mothers are at work

According to the Survey of Income and Program Participation, in the fall of 1993 there were 9.9 million children under age 5 who were in need of child care while their mothers were working. Almost half (48 percent) of these preschool-age children were primarily cared for by relatives (figure 1). Seventeen percent of preschool children were cared for by their grandparents during their mothers' working hours; about the same proportion were cared for by their fathers. The majority of preschoolers who were cared for by relatives were, in fact, cared for by either their grandparents or their fathers, each accounting for a third of the care provided by relatives. Other relatives such as aunts, uncles, and cousins played a smaller role in providing child care services overall, amounting to about 9 percent of all arrangements for preschoolers. Mothers provided the remainder of the care by relatives. About 6 percent of preschoolers were cared for by their mothers; most of these moms worked at home.

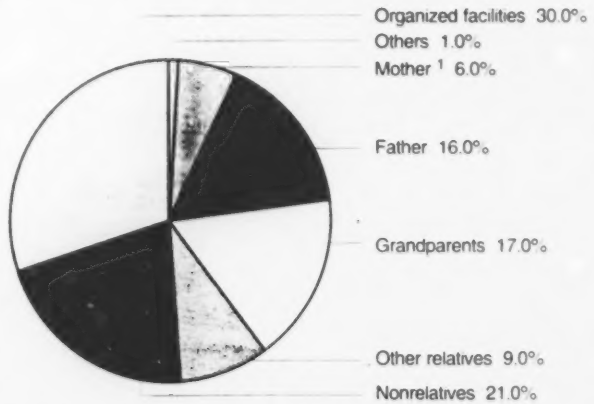
A little more than half (52 percent) of preschool-age children were cared for by someone other than relatives while their mothers were at work. In 1993, more preschoolers were cared for in organized child care facilities than in any other single arrangement; approximately 1 in 3 preschoolers were cared for in organized child care facilities. Nonrelatives, including in-home babysitters and family day care providers, were also important sources of child care; about 1 in 5 preschool-age children were cared for by nonrelatives.

Another important consideration in the choice of child care arrangements is the environment in which care is provided. In 1993, about a third of preschoolers were cared for in each of the three major child care environments: the child's home, the provider's home, and organized child care facilities (table 1).

Defining Child Care Arrangements

Relatives include mothers, fathers, siblings, grandparents, and other relatives. **Other relatives** include aunts, uncles, and cousins. An **organized child care facility** is a day care center, a nursery school, or a preschool. A **family day care provider** is a nonrelative who cares for one or more unrelated children in her/his home. **In-home babysitters** are nonrelatives who provide care within the child's home. **Nonrelatives** include in-home babysitters and family day care providers.

Figure 1.
Primary Child Care Arrangements Used by Families With Employed Mothers for Preschoolers: 1993



[1] Includes mothers working at home or away from home.

BEST COPY AVAILABLE

Table 1.
Primary Child Care Arrangements of Preschoolers by Mother's Employment Status: Fall 1993

Type of arrangement	All preschoolers		Employment status [1]							
			Employment schedule				Shift work status			
			Full time		Part time		Day shift		Non-day shift	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Preschoolers	9,937	100.0	6,426	100.0	3,512	100.0	6,083	100.0	3,855	100.0
Care in child's home	3,054	30.7	1,656	25.8	1,398	39.8	1,465	24.1	1,589	41.2
By father	1,585	15.9	719	11.2	866	24.7	657	10.8	928	24.1
By grandparent	649	6.5	384	6.0	264	7.5	361	5.9	287	7.4
By other relative	328	3.3	227	3.5	101	2.9	166	2.7	162	4.2
By nonrelative	492	5.0	325	5.1	167	4.8	281	4.6	211	5.5
Care in provider's home	3,184	32.0	2,239	34.9	945	26.9	2,095	34.4	1,089	28.3
By grandparent	996	10.0	684	10.6	312	8.9	593	9.7	403	10.5
By other relative	543	5.5	384	6.0	159	4.5	360	5.9	183	4.8
By nonrelative	1,645	16.6	1,171	18.2	474	13.5	1,143	18.8	503	13.0
Organized child care facilities	2,972	29.9	2,166	33.7	806	22.9	2,146	35.3	826	21.4
Day/group care center	1,823	18.3	1,398	21.8	425	12.1	1,369	22.5	453	11.8
Nursery/preschool	1,149	11.6	768	11.9	381	10.9	776	12.8	373	9.7
Mother cares for child at work [2]	616	6.2	280	4.4	336	9.6	296	4.9	321	8.3
Other [3]	111	1.2	84	1.3	26	0.8	81	1.3	30	0.8

[1] Calculations based on mother's principal job only.
[2] Includes women working at home or away from home.
[3] Includes preschoolers in kindergarten and school-based activities.

Preschoolers' child care arrangements have changed dramatically over the past few years

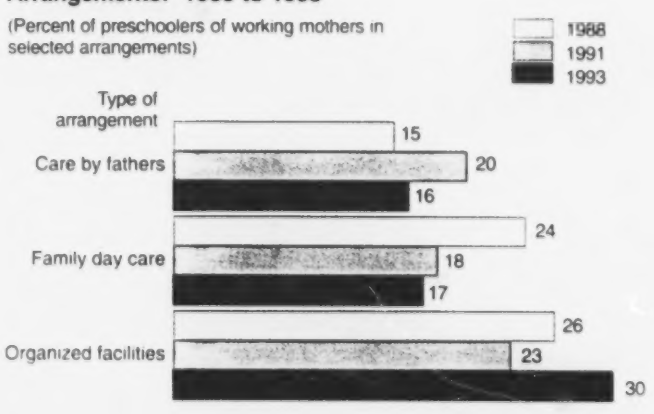
Noteworthy changes have recently occurred in the types of child care arrangements parents use for their preschoolers. Between 1988 and 1991, the proportion of preschoolers who were cared for in organized child care facilities declined from 26 percent to 23 percent (figure 2). However, between 1991 and 1993, this trend reversed itself and the proportion of preschoolers who were cared for in organized facilities jumped from 23 percent to 30 percent, representing a 30 percent increase over the 2-year period.

During the same time periods these shifts were occurring, there were offsetting changes in the proportions of preschoolers being cared for by fathers and family day care providers. Care by fathers, while remaining at about the 15 percent level between 1977 and 1988, sharply increased to 20 percent by 1991. However, between 1991 and 1993, the proportion of preschoolers being cared for by their fathers dropped back down to 16 percent.

Family day care had also been a consistent source of child care arrangements, providing 23 percent of all arrangements for preschoolers in 1977 and 1988. However, the proportion of children cared for by family day care providers sharply fell from 24 percent in 1988 to 18 percent in 1991 and remained at this historically low level in 1993.

Between 1988 and 1991, the decreases in the use of organized child care facilities and family day care providers, and the increase in care by fathers, may have been rational responses to the economic recession which occurred during the same time period. Increases

Figure 2.
Changes in Selected Child Care Arrangements: 1988 to 1993



in the proportion of fathers who were unemployed and working at part-time jobs meant that more fathers were available to serve as potential child care providers. These shifts also may have reflected the desire of parents to cut down on child care costs by switching to more parental supervision of their children whenever possible. Between 1991 and 1993, the fact that the decline in care by fathers and the increase in the use of organized facilities occurred at the same time as the recession was ending also supports this notion. Note also that not only did father care decline during this period, but mother care declined as well from 9 percent in 1991 to 6 percent in 1993.

It could be then, that the increase in care by fathers between 1988 and 1991 which many thought was part of a growing social trend for fathers to become more involved in the rearing of their children, actually was driven more by the economy and the attendant economic circumstances of families with young children. The continued comparative unpopularity of family day care may in part reflect a growing uneasiness of parents to use a minimally regulated arrangement where there is a single provider, as opposed to a heavily regulated arrangement — an organized child care facility — where there are a number of providers. Recent media reports of child neglect and abuse at the hands of babysitters and family day care providers may also be a factor in the decline in the use of family day care providers.

Mothers working evening or night shifts have an easier time arranging for relative and in-home care

The type of shift that a mother works makes a big difference in the kind of primary care arrangements she uses. When compared to children whose mothers work day shifts, children whose mothers work non-day shifts are less likely to be cared for by someone other than a relative.[1] For example, among preschoolers whose mothers worked a day shift at their principal job, 60 percent were cared for by someone who was not related to them compared with only 41 percent of children whose mothers worked a non-day shift (figure 3).[2]

Use of organized child care facilities was also more prevalent for children of women working day shifts, accounting for 37 percent of all child care arrangements (figure 3). Because organized child care facilities often may not be available during evenings or on weekends, children of women working non-day shifts used these facilities less frequently, amounting to 22 percent of all child care arrangements.

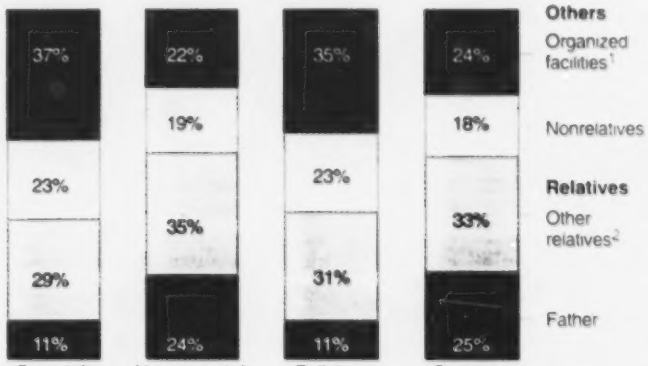
[1] Day shift in this report is defined as a work schedule where at least one-half of the hours worked daily were between 8:00 a.m. and 4:00 p.m. All other schedules in which the majority of hours are worked outside of this period or which have irregular or rotating hours are classified as non-day work shifts.

[2] The 37 percent of preschoolers who are cared for in organized facilities includes about 1 percent of children who are in kindergarten or school based activities.

Working non-day rather than day shifts may offer more opportunities for women with preschoolers to secure care for their children by relatives, especially by the children's fathers. Overall, 59 percent of the preschool-age children of women working non-day shifts were cared for by relatives compared with only 40 percent of the children of women working day shifts. In addition, preschoolers whose mothers worked non-day shifts were two and one-half times as likely as preschoolers whose mothers worked day-shifts to have their fathers as primary care providers (24 percent vs. 11 percent).

Children whose mothers worked day shifts were also more likely to be cared for in another home than children whose mothers worked non-day shifts (table 1). Among preschoolers whose mothers worked a day shift, 34 percent were cared for in another home compared with 28 percent of children whose mothers worked a non-day shift. In contrast, only 24 percent of the preschool-age children of women working day shifts were cared for in their own home compared with

Figure 3.
Child Care Arrangements for Preschoolers by Employment Status of Mother: 1993



[1] Includes day care centers, nursery schools, preschools, and about 1 percent of children in kindergarten or school based activities.
[2] Includes mothers, siblings, grandparents, and other relatives.

41 percent of the children of women working non-day shifts.

Mothers working part time also have an easier time arranging for relative and in-home care

Child care patterns by the number of hours worked are similar — preschool children of mothers employed full time were less likely to be cared for by relatives (42 percent) than were children of mothers employed part time (58 percent). On the other hand, full-time working mothers relied more heavily on child care by nonrelatives (23 percent) and organized child care facilities (35 percent) than did part-time working mothers.

Preschool-age children of part-time working mothers were twice as likely to be cared for by their mothers while at work (10 percent), than were children of mothers who worked full time (4 percent, table 1). In addition, child care provided by the father was also more frequent when the mother worked part time (25 percent) than full time (11 percent). Families may have chosen a part-time work schedule for mothers in order to reduce work schedule conflicts between spouses, thus providing these families with a greater opportunity for one parent to care for their children while the other parent is at work.

In 1993, children whose mothers were employed full time were less likely to be cared for in the child's home (26 percent) than were children whose mothers were employed part time (40 percent). However, no differences at all were found in the proportion of grandparents and other relatives (10 percent) or nonrelatives (5 percent) caring for preschoolers in the child's home among children whose mothers were employed part time versus full time. In contrast, full-time working mothers relied more heavily on child care in someone else's home (35 percent) than did part-time working mothers (27 percent).

Black and Hispanic mothers rely more heavily on their relatives to provide child care assistance while they are working than do White mothers

In 1993, at least half of the care received by Black and Hispanic preschoolers was provided by their relatives compared to only about 45 percent of the care received by White children (table 2). About 4 in 10 Black and Hispanic children were cared for by grandparents or other relatives compared to only about 2 in 10 White children. Care by grandparents was especially important to Black and Hispanic families, accounting for one-fifth of all arrangements used for preschoolers. Care by fathers was less common among Black children than among either White or Hispanic children.

In contrast, White preschoolers were more likely to be cared for by nonrelatives or in organized child care facilities than either Black or Hispanic preschoolers (54 percent compared with 48 percent and 41 percent respectively). But, Black and White children were more likely to use organized child care facilities (about 32 percent each), than were Hispanic children (21 percent).

Children who live with only one parent are much more likely to be cared for by their grandparents and other relatives than are children who live with married-couple parents

Because children who live with married couple parents are more likely to live with their fathers than are children who live with only one parent, preschoolers with married parents are more likely to be cared for by their fathers. In 1993, preschoolers in married-couple families were fourteen times more likely to be cared for by their fathers than preschoolers whose parents were divorced, widowed, or separated, and 4 times more likely to be cared for by their fathers than children who lived with a never-married parent.

In contrast, children in one-parent families were much more likely to be cared for by grandparents and other relatives than those in married-couple families. Only 14 percent of children living with married-couple parents were cared for by their grandparents compared with 21 percent of preschoolers whose parents were divorced, widowed, or separated and 28 percent of preschoolers whose parents never married. Compared with preschoolers whose parents were married, preschoolers whose parents were not married were twice as likely to be cared for by other relatives (7 percent vs. 16 percent).[3]

Relatives provide a great deal of child care for preschoolers in poor families

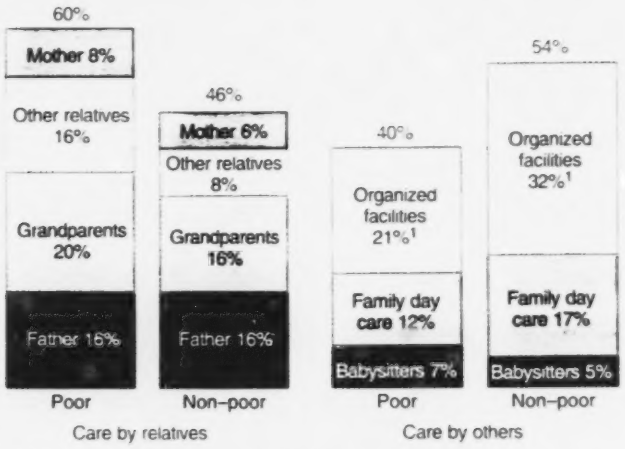
For many families child care can be a costly expense. However, asking relatives to serve as child care providers may be one way to avoid having to pay for child care. Child care costs constitute an especially large portion of the poor family's budget, so it comes as no surprise that poor families rely more heavily on relatives to help them out with child care than non-poor families do.[4] In 1993, 60 percent of all child care for preschoolers in poor families was provided by relatives, compared to only 46 percent for non-poor families (figure 4).

Grandparents and other relatives play an especially large part in the child care of poor preschoolers. Preschoolers in poor families were 50 percent more likely to be cared for by their grandparents and other relatives than were preschoolers in non-poor families (36 percent vs.

[3] The proportion of preschoolers of widowed, separated, or divorced mothers who were cared for by grandparents (21 percent) is not significantly different from the proportion who were cared for by other relatives (16 percent).

[4] For more information about child care costs see Casper, Lynne M. 1995. *What Does It Cost to Mind Our Preschoolers?* U.S. Government Printing Office: Washington DC.

Figure 4.
Child Care Arrangements for Preschoolers by Poverty Status: 1993



[1] Includes day care centers, nursery schools, preschools, and about 1 percent of children in kindergarten or school based activities.

24 percent). In contrast, fathers and mothers were no more likely to provide child care in poor than non-poor families.

Poor families are less likely to use organized child care facilities than non-poor families because child care in an organized facility is one of the most expensive of all types of child care arrangements. In 1993, children in poor families were two-thirds less likely than children in non-poor families to be cared for in organized child care facilities while their mothers were at work (21 percent vs. 32 percent).

Children in families receiving welfare benefits are more dependent on relatives to provide child care

In the fall of 1993, approximately 1.5 million preschoolers lived in families who received either General Assistance, AFDC (Aid to Families with Dependent Children), Food Stamps, or WIC (Special Supplemental Food Program for Women Infants and Children). A significant proportion of preschoolers lived in families who participated in more than one program at the same time (43 percent).

Like children in poor families, those receiving either General Assistance, AFDC, Food Stamps, or WIC benefits were more likely to be cared for by relatives than were those not receiving these benefits (57 percent vs. 46 percent). Children whose families received at least one type of assistance were also less likely to be cared for in organized day care facilities than were those not receiving these benefits (23 percent vs. 31 percent).

When we examine the usage of child care arrangements by recipients in specific programs, we see this pattern does not necessarily hold. Children in families enrolled in the WIC program were 20 percent more likely to be cared for by relatives than were children not enrolled in the program. Similarly, children in families receiving Food Stamps were also 20 percent more likely to be cared for by relatives than were children not receiving Food Stamps. However, children in families receiving AFDC were no more likely to be cared for by relatives than were those not receiving AFDC. The principal reason for this difference is because a smaller proportion of preschoolers are cared for by their fathers in AFDC families (5 percent) than in WIC (14 percent) and Food Stamp families (11 percent).[5]

Similar to children in poor families, children in families receiving WIC benefits are much less likely to be cared for in organized child care facilities when compared with those not receiving WIC benefits (19 percent vs. 31 percent). In contrast, AFDC and Food Stamp recipients are about equally as likely as non-recipients to use organized child care facilities. Why would WIC recipients be less likely to use organized child care facilities than non-recipients? One reason may be because mothers in families receiving WIC benefits are younger and have younger children than mothers in families receiving other types of benefits and some organized facilities have regulations restricting enrollment to older children. In 1993 for example, only 19 percent of infants under 1 year of age were cared for in organized facilities while their mothers were at work compared with 42 percent of 4-year-olds. Note also that in families with mothers aged 15 to 24, one-fifth of preschoolers were cared for in organized facilities compared with one-third of those in families with mothers who are 35 years of age or more.

Organized child care facilities are more popular in the South and in the suburbs

In 1993, families in the South were more likely to choose organized child care facilities and less likely to choose relatives as primary care providers for their preschoolers than families in any other region of the country. In contrast, families residing in the Northeast were the most likely to call on relatives to provide care for their preschoolers. The greater use of relatives in the Northeast

[5] Proportions of children cared for by their fathers in WIC (14 percent) and Food Stamps (11 percent) families were not significantly different from each other.

Table 2.
Primary Child Care Arrangements Used for Preschoolers by Families With Employed Mothers: Fall 1993

Characteristics	Number of children	Type of primary care arrangement										
		Care in child's home by				Care in another home by			Organized facilities			
		Father	Grand-parent	Other relative	Non-relative	Grand-parent	Other relative	Non-relative	Day-care center	Nursery/ pre-school	Mother cares for child[1]	Other[2]
All Preschoolers	9,937	1,585	649	328	492	996	543	1,645	1,823	1,149	616	111
Race and Hispanic Origin												
White, not Hispanic	7,295	1,252	389	141	370	699	299	1,294	1,461	807	529	54
Black, not Hispanic	1,161	101	123	82	17	106	135	164	188	191	33	22
Hispanic origin	1,078	161	86	85	76	158	88	136	110	119	34	26
Other	403	71	50	21	30	33	21	51	64	31	21	9
Age of Child												
Less than 1 year	1,631	285	123	45	98	183	108	364	284	29	113	-
1 year	2,122	392	186	88	84	229	136	449	408	56	92	3
2 years	1,969	304	117	55	139	247	113	327	392	140	132	3
3 years	2,161	300	128	76	87	172	111	322	424	386	152	3
4 years	2,055	304	95	65	85	166	74	184	314	539	127	102
Marital Status												
Married, husband present	7,841	1,514	378	183	394	750	360	1,282	1,429	924	543	84
Widowed, separated, divorced	1,012	14	113	70	60	101	90	176	192	137	48	12
Never married	1,084	57	158	75	39	144	94	188	201	88	25	14
Age of Mother												
15 to 24 years	1,566	225	184	69	61	226	118	279	256	77	60	10
25 to 34 years	5,984	1,040	340	150	263	615	334	982	1,113	713	363	71
35 years and over	2,387	320	124	108	168	155	91	385	454	359	192	30
Educational Attainment												
Less than high school	1,051	180	109	98	50	90	85	155	116	96	64	8
High school, 4 years	3,549	611	258	115	118	447	253	564	600	346	201	38
College, 1 to 3 years	2,772	447	155	69	123	267	139	437	542	347	210	35
College, 4 or more years	2,566	347	127	46	203	192	66	489	564	360	141	30
Enrollment in School												
Enrolled in school	742	89	69	27	24	58	30	124	166	101	48	8
Not enrolled in school	9,196	1,496	579	301	468	938	513	1,522	1,657	1,048	569	104
Monthly Family Income[3]												
Less than $1,200	1,070	170	70	52	61	143	100	161	143	73	83	13
$1,200 to $2,999	3,268	648	177	116	96	370	235	490	516	324	262	35
$3,000 to $4,499	2,578	454	189	70	114	266	86	488	476	275	136	26
$4,500 and over	2,981	313	204	90	219	210	123	498	685	475	127	38
Poverty Level[3]												
Below poverty	1,068	173	88	65	70	126	104	131	128	83	87	13
Above poverty	8,829	1,412	552	263	419	862	439	1,506	1,692	1,064	521	98
Program Participation												
All recipients[4]	1,537	198	141	91	62	193	157	229	247	111	98	11
Non-recipient[5]	8,401	1,387	507	237	431	803	386	1,416	1,576	1,038	519	101
AFDC recipient	443	20	44	32	24	43	49	68	81	48	32	2
Non-recipient	9,495	1,565	605	296	468	953	494	1,577	1,742	1,101	584	109
WIC recipient	1,019	139	89	70	28	118	126	178	139	58	67	6
Non-recipient	8,919	1,446	559	258	465	878	417	1,467	1,683	1,091	549	105
Food Stamps recipient	873	93	81	48	38	113	107	93	155	82	52	11
Non-recipient	9,064	1,492	568	280	454	883	436	1,552	1,668	1,067	564	101
Region												
Northeast	1,748	440	112	78	89	185	93	189	290	152	104	16
Midwest	2,773	453	200	78	92	272	120	609	479	237	211	21
South	3,319	348	203	93	184	337	237	506	695	531	134	50
West	2,097	344	133	80	126	202	93	341	359	229	166	23
Metropolitan Residence												
Metropolitan	7,746	1,246	507	256	433	761	391	1,234	1,402	960	467	88
In central cities	2,844	495	218	108	147	296	143	471	465	316	150	34
Suburbs	4,902	751	290	148	286	465	247	763	937	644	317	55
Nonmetropolitan	2,191	339	141	72	59	235	152	412	420	189	149	23

- Rounds to or represents zero. [1]Includes mothers working at home or away from home. [2]Includes preschoolers in kindergarten and school-based activities. [3]Omits preschoolers whose families did not report income. [4]Family receiving either AFDC, Food Stamps or WIC, or any combination of the three programs. Also includes a small number of preschoolers (18,000) whose families are on General Assistance. [5]Family not receiving either General Assistance, AFDC, Food Stamps or WIC.

can be attributed to the greater use of fathers in the region, where 1 in 4 preschoolers were cared for by their fathers, compared to 1 in 6 in the Midwest and West, and only 1 in 10 in the South.

Families in the suburbs were more likely to use organized child care facilities to care for their preschoolers (32 percent) than were families in central cities or nonmetropolitan areas (28 percent each). On the other hand, preschoolers residing in central cities and nonmetropolitan areas (50 percent each) were more likely than preschoolers residing in the suburbs (45 percent) to be cared for by relatives.

Upcoming reports

Sharp changes in the distribution of preschoolers' child care arrangements have been observed between 1988 and 1993. For example, between 1988 and 1991 care by fathers rose substantially for the first time since 1977. However, between 1991 and 1993 there was a decline in the use of fathers as principle care providers back down to the level it had been before 1991. In our next report, we explore the reasons for this shift and the other shifts in child care arrangements that occurred over this period.

More information

A detailed table package showing the costs of child care and the child care arrangements of preschool and gradeschool children is available on floppy disk for $20 (PE-33) or on paper for $10 (PPL-34) from the Population Division's Statistical Information Office (301-457-2422). The table package is also available on the INTERNET (http://www.census.gov); look for child care data from the Population Division. Information about child care costs is available in the report *What Does It Cost to Mind Our Preschoolers?* (P70-52). To order a copy of this report, contact the Statistical Information Office.

Contacts:
Child care issues—
Lynne Casper
301-457-2416
lcasper@census.gov

Accuracy of the data

All statistics are subject to sampling error, as well as nonsampling error such as survey design flaws, respondent classification and reporting errors, data processing mistakes, and undercoverage. The Census Bureau has taken steps to minimize errors in the form of quality control and edit procedures to reduce errors made by respondents, coders and interviewers. Ratio estimation to independent age-race-sex population controls partially corrects for bias due to survey undercoverage. However, biases exist in the estimates when missed persons have characteristics different from those of interviewed persons in the same age-race-sex group.

Analytical statements in this report have been tested and meet statistical standards. However, because of methodological differences, use caution when comparing these data with data from other sources. Contact Jennifer Guarino, Demographic Statistical Methods Division, at 301-457-4223 or on the INTERNET at jguarino@census.gov for information on (1) the source of data, (2) the accuracy of estimates, (3) the use of standard errors, and (4) the computation of standard errors for estimates in this publication.

U.S. DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

SPECIAL FOURTH-CLASS RATE
POSTAGE & FEES PAID
Bureau of the Census
Permit No. G-58

OFFICIAL BUSINESS
Penalty for Private Use, $300